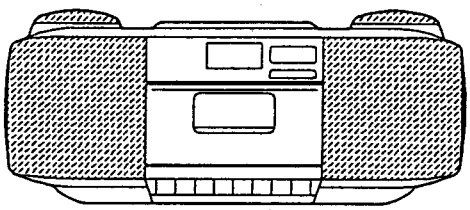
aiwa

aiwa SERVICE

CSD-ES40
CSD-ES55

SERVICE MANUAL



COMPACT DISC STEREO RADIO
CASSETTE RECORDER

- BASIC TAPE MECHANISM:TN-21ZSC-1647
- BASIC CD MECHANISM:KSM-2101BDM
- TYPE: EEZ.EZ

S/M Code No. 09-962-124-10T

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

- Caution: Invisible laser radiation when open and interlocks defeated avoid expo-sure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainit-ulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylit-tävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radi-ation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

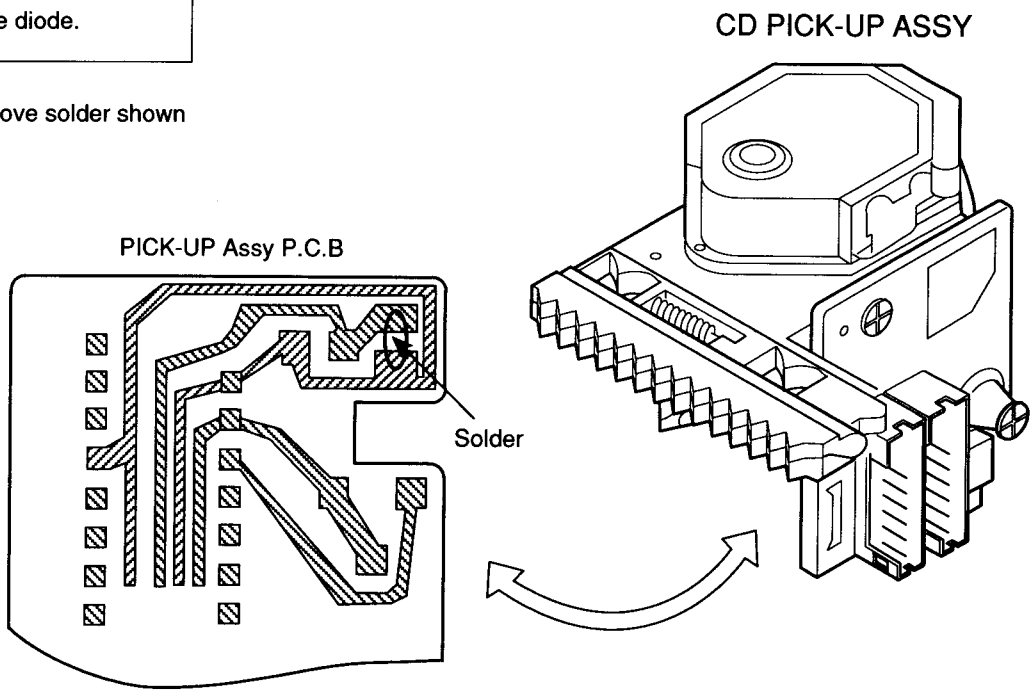
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block (KSS-210B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.



SPECIFICATIONS

Tuner section

Frequency range FM: 87.5–108.0 MHz
Antenna: FM antenna
MW:530–1,605 kHz
Antenna: Ferrite bar antenna
LW: 150–285 kHz
Antenna: Ferrite bar antenna

Deck section

Track format 4 tracks, 2 channels
Frequency range Normal tape: 50–12,500 Hz (EIAJ)
Recording system AC bias
Erasing system Magnet erase
Heads Recording/playback head (1)
Erasure head (1)

CD player section

Disc Compact disc
Scanning method Non-contact optical scanner (semiconductor laser)
Laser Semiconductor laser λ=780 nm
Rotation speed Approx. 500–200 rpm/CLV
Error correction Cross interleave, Reed Solomon code
No. of channels 2 channels
D/A conversion 1-bit linear

Common section

Speaker 100 mm cone type (2)
50 mm cone type (2)
Output Headphones jack (stereo mini-jack)
Power output 6.5 W + 6.5 W (DIN MUSIC POWER)
4 W + 4 W (10% T.H.D./4Ω DC)
3.1 W + 3.1 W (DIN 1% Rated Power)
Power requirements DC 12 V using eight R14 (size C) batteries
AC 230V
Power consumption 27 W
Dimensions 414 (W) × 178 (H) × 244 (D) mm
($16\,^{3}/_{8} \times 7\,^{1}/_{8} \times 9\,^{5}/_{8}$ in.)
Weight Approx. 3.6 kg (7.9 lb) (excluding batteries)

- Design and specifications are subject to change without notice.

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

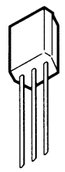
NOTE : MW=AM

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
IC			
	S1-007-510-000		IC,KA22241
	S1-011-860-000		IC,LA1186N
	S1-007-310-000		IC,KA22471
	S2-119-204-110		IC,KA2263
	87-070-134-010		IC,TA2065F
	87-070-336-010		IC,TC9284BF
	87-017-801-080		IC,TA2058F
	87-001-536-010		IC,NJM78M05FA
	87-070-426-010		IC,TA8173AP
	87-001-485-010		IC,TA8207K
	87-026-661-010		IC,SBX8010-F<55>
	85-CD7-602-010		IC,TMP47C620DF-N797
TRANSISTOR			
	87-026-287-010		TR,DTC143ES
	87-026-462-080		TR,2SC1740S
	S2-805-0C1-000		TR,8050C
	S2-855-0C1-000		TR,8550C
	87-026-291-080		TR,DTC124XS
	89-318-155-010		TR,2SC1815Y
	89-110-155-010		TR,2SA1015GR
	89-112-965-010		TR,2SA1296GR
	89-318-154-810		TR,2SC1815GR
	89-318-155-810		TR,2SC1815Y
	89-210-154-010		TR,2SB1015Y
	89-320-011-089		TR,2SC2001K
DIODE			
	87-020-465-010		DIODE,1SS133
	82-135-799-010		DIODE,IN4148-2
	S3-Z62-V80-000		ZENER,6.2V-1/2W
	S3-FR2-021-000		DIODE,FR202
	S0-000-000-001		ZENER,HZ6LB1
	S0-000-000-002		ZENER,HZ9LA1
MAIN C.B			
C3	87-016-073-080		CAP,E 1-50V
C4	87-016-073-080		CAP,E 1-50V
C5	87-010-444-080		CAP,E 22UF-50V
C6	87-010-444-080		CAP,E 22UF-50V
C9	87-010-037-010		CAP,E 10UF-50V
C10	87-010-037-010		CAP,E 10UF-50V
C15	87-010-374-010		CAP,E 47 10V
C23	87-010-248-010		CAP,E 220 10V
C24	87-010-263-010		CAP,E 100 10V
C162	87-010-248-010		CAP,E 220 10V
C304	87-010-374-010		CAP,E 47 10V
C305	87-010-374-010		CAP,E 47 10V
C306	87-010-263-010		CAP,E 100 10V
C309	87-010-037-010		CAP,E 10UF-50V
C310	87-010-374-010		CAP,E 47 10V
C313	87-010-037-010		CAP,E 10UF-50V
C314	87-010-444-080		CAP,E 22UF-50V
C315	87-010-403-010		CAP,E 3.3 50
C321	87-010-265-010		CAP,E 33 16
C322	87-010-263-010		CAP,E 100 10V
C326	87-010-221-040		CAP,E 470UF-10V
C334	87-010-248-010		CAP,E 220 10V
C335	87-010-374-010		CAP,E 47 10V
C342	87-015-693-080		CAP,E 0.33UF-50V
C343	87-015-693-080		CAP,E 0.33UF-50V
C348	87-010-221-040		CAP,E 470UF-10V
C352	87-010-236-080		CAP,E 1000UF-10V
C357	87-010-271-010		CAP,E 1000UF-16V
C359	87-010-221-040		CAP,E 470UF-10V
C360	87-010-035-010		CAP,E 2.2-50V
C380	87-010-374-010		CAP,E 47 10V
C390	87-016-073-080		CAP,E 1-50V
C419	87-010-412-010		CAP,E 10UF-25V
C421	87-010-412-010		CAP,E 10UF-25V
C424	87-010-412-010		CAP,E 10UF-25V
C425	87-010-037-010		CAP,E 0.47-50V
C426	87-010-404-010		CAP,E 4.7 50V
C427	87-016-073-080		CAP,E 1-50V
C429	87-016-073-080		CAP,E 1-50V
C430	87-015-391-010		CAP,E 0.22UF 50V
C431	87-015-391-010		CAP,E 0.22UF 50V
C456	87-010-412-010		CAP,E 10UF-25V
C505	87-010-582-010		CAP,E 4700UF-35V
C532	87-010-037-010		CAP,E 10UF-50V
C534	87-010-037-010		CAP,E 10UF-50V
C538	87-010-037-010		CAP,E 10UF-50V
C540	87-010-544-010		CAP,E 0.1UF-50V
C541	87-010-544-010		CAP,E 0.1UF-50V
C542	87-010-038-010		CAP,E 22UF-25V
C543	87-010-038-010		CAP,E 22UF-25V
C546	87-010-235-010		CAP,E 470 16
C547	87-010-380-010		CAP,E 47 16V
C548	87-010-380-010		CAP,E 47 16V
C551	87-010-236-080		CAP,E 1000UF-10V
C552	87-010-236-080		CAP,E 1000UF-10V
C554	87-010-263-010		CAP,E 100 10V
C556	87-010-248-010		CAP,E 220 10V
C559	87-010-260-010		CAP,E 47 25V
C560	87-010-260-010		CAP,E 47 25V
C561	87-010-045-010		CAP,E 100UF-25V
C562	87-010-248-010		CAP,E 220 10V
C563	87-010-221-040		CAP,E 470UF-10V
C572	87-010-037-010		CAP,E 10UF-50V
C905	87-015-697-080		CAP,E 3.3UF-50V BP
C906	87-015-697-080		CAP,E 3.3UF-50V BP
CF401	S2-900-083-000		CER,FILTER FM 10.7MHZ
L1	S6-020-610-000		COIL,OSC AC
L301	S2-600-121-000		INDUCTOR,10UH
L401	S7-A00-100-000		COIL,FM 4.5-3.5-0.8
L402	S7-A00-210-000		COIL,FM 7-3.5
L403	S7-A00-100-000		COIL,FM 4.5-3.5-0.8
L404	S7-B00-771-000		COIL,ANT AM
L405	S7-C00-241-000		COIL,ANT LW
SFR301	SR-V10-380-000		SFR,10K
SFR302	SR-V10-480-000		SFR,100K
SFR303	SR-V10-480-000		SFR,100K
SFR304	SR-V10-480-000		SFR,100K
SW1	S8-026-010-000		SW,SL REC 6P2T
SW401	S8-025-710-000		SW,SLIDE 6P3T
SW501	S8-025-910-000		SW,SLIDE 4P3T
T401	S6-020-110-000		IFT,FM 10-10
T402	S6-020-810-000		COIL,OSC MW
T403	S6-020-310-000		IFT,MW 10-10
T404	S6-020-410-000		IFT,FM
T405	S6-020-510-000		IFT,MW
T406	S6-020-710-000		COIL,OSC LW
TC401	SC-N20-050-MS0		CAP,TRIMMER 20pF
TC402	SC-N10-050-MS0		CAP,TRIMMER 10pF
VC401	S2-300-421-000		PVC(L2S-22CNT)
VR401	SR-V10-340-000		SFR 10K B 8MM H TYPE
X101	87-030-283-010		VIB,CER CSA3.60MGF226
X301	S2-900-312-000		CER RESO FCR16.93M2G
KEY C.B			
C506	87-016-073-080		CAP,E 1-50V
C507	87-016-073-080		CAP,E 1-50V
C508	87-016-073-080		CAP,E 1-50V
C509	87-016-073-080		CAP,E 1-50V

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C510	87-010-248-010		CAP,E 220 10V
C518	87-010-263-010		CAP,E 100 10V
C519	87-010-260-010		CAP,E 47 25V
C521	87-010-407-010		CAP,E 33UF-50V
C526	87-015-391-010		CAP,E 0.22UF 50V
C527	87-015-391-010		CAP,E 0.22UF 50V
C702	87-010-263-010		CAP,E 100 10V
C706	87-010-263-010		CAP,E 100 10V<55>
C708	87-010-248-010		CAP,E 220 10V
C709	87-010-037-010		CAP,E 10 50V
L701	S2-600-391-000		COIL,33UH
L702	S7-A00-570-000		COIL,TOROIDAL
L703	S7-A00-570-000		COIL,TOROIDAL
LCD701	S2-700-851-000		LCD,HLC8787-011319
LED701	S2-800-521-000		LED,L-27MM(RED)
LED705	S2-800-521-000		LED,L-27MM(RED)
LED706	S2-800-541-000		LED,L27MM(GRN)
LED707	S2-800-521-000		LED,L-27MM(RED)
SW4	S8-025-610-000		SW/W LATCH DOOR CD
SW701	S8-025-810-000		SW,TACT KHH-913
SW702	S8-025-810-000		SW,TACT KHH-913
SW703	S8-025-810-000		SW,TACT KHH-913
SW704	S8-025-810-000		SW,TACT KHH-913

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
SW705	S8-025-810-000		SW,TACT KHH-913
SW706	S8-025-810-000		SW,TACT KHH-913
SW707	S8-025-810-000		SW,TACT KHH-913
SW708	S8-025-810-000		SW,TACT KHH-913
SW709	S8-025-810-000		SW,TACT KHH-913
SW710	S8-025-810-000		SW,TACT KHH-913
X701	87-030-194-010		X'TAL 32.768KHZ
VOL C.B			
J602	S2-3B0-291-000		JACK,HP
VR602	S1-501-311-000		VR,50KA
PT C.B			
⚠	S2-004-631-000		HOLDER,FUSE
⚠F901	S4-001-610-000		FUSE,3.15A/250V
⚠PT901	S9-028-910-000		PT,EI-57
MOTOR-1 C.B			
M2	9X-262-513-210		SLED MOTOR ASSY
SW1	91-572-085-110		LEAF SW

TRANSISTOR ILLUSTRATION

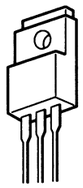


ECB

2SC1740
DTC124
DTC143

ECB

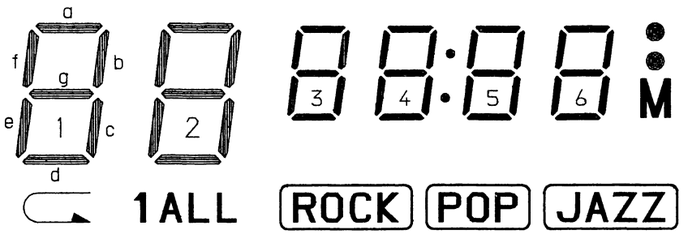
2SA1015
2SA1296
2SC1815
2SC2001
8050
8550



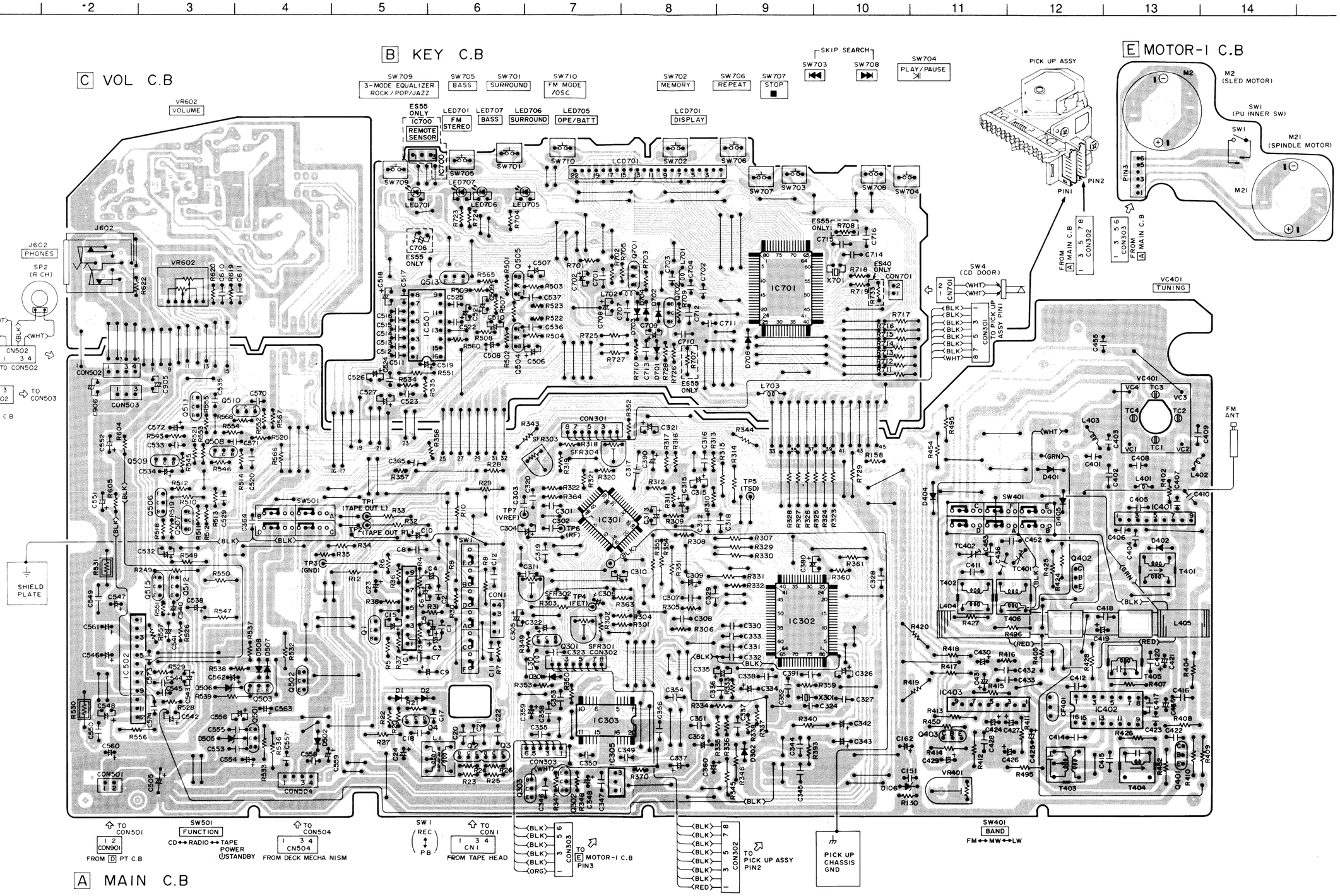
BCE

2SB1015

LCD ILLUSTRATION



NO.	COM1	COM2	COM3
1			COM3
2		COM2	
3	COM1		
4	● (上)	● (下)	M
5	6b	6c	JAZZ
6	6a	6g	6d
7	6f	6e	
8	5b	5c	
9	5a	5g	5d
10	5f	5e	POP
11	4b	4c	●
12	4a	4g	4d
13	4f	4e	
14	3b	3c	
15	3a	3g	3d
16	3f	3e	ROCK
17	2b	2c	
18	2a	2g	2d
19	2f	2e	ALL
20	1b	1c	1
21	1a	1g	1d
22	1f	1e	⊂


B KEY C.B
C VOL C.B
E MOTOR-1 C.B
A MAIN C.B
SW709 3-MODE EQUALIZER ROCK/POP/JAZZ
SW705 BASS
SW701 SURROUND
SW710 FM MODE /OSC
SW702 MEMORY
SW706 REPEAT
SW707 STOP
SKIP SEARCH
SW703
SW708
SW704 PLAY/PAUSE
VR602 VOLUME
ES55 ONLY
IC700 REMOTE SENSOR
LED701 FM STEREO
LED707 BASS
LED706 SURROUND
LED705 OPE/BATT
LCD701 DISPLAY
PICK UP ASSY
PIN1
PIN2
M2 (SLED MOTOR)
SW1 (PU INNER SW)
M21 (SPINDLE MOTOR)
PIN3
FROM A MAIN C.B CON303
FROM A MAIN C.B CON302
J602 PHONES
SP1 (L CH)
SP2 (R CH)
CN502
TO CON502
CON902
TO CON503
FROM D PT C.B
SW4 (CD DOOR)
CN701
CON701
TO PICK UP ASSY PIN1
VC401 TUNING
FM ANT
SHIELD PLATE
SW501 FUNCTION
CD↔RADIO↔TAPE
POWER
STANDBY
CON901
FROM D PT C.B
CON501
CON504
FROM DECK MECHA NISM
SW1 (REC / PB)
CN1
FROM TAPE HEAD
CON303
TO E MOTOR-1 C.B PIN3
CON302
TO PICK UP ASSY PIN2
PICK UP CHASSIS GND
SW401 BAND
FM↔MW↔LW
TP1 (TAPE OUT L)
TP2 (TAPE OUT R)
TP3 (GND)
TP4 (FET)
TP5 (TSD)
TP6 (RF)
TP7 (VREF)
IC501
IC502
IC301
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IC701
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IC401
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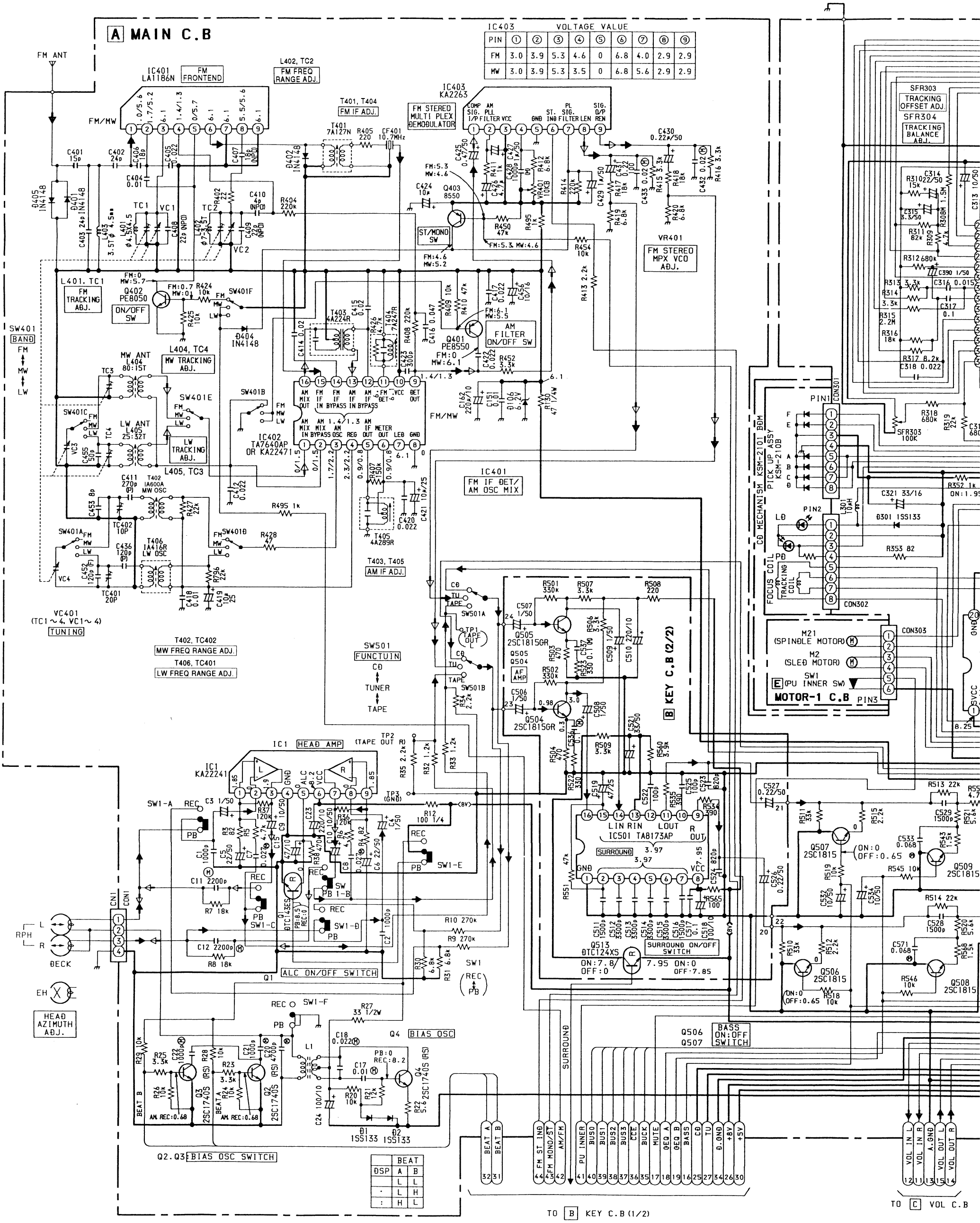
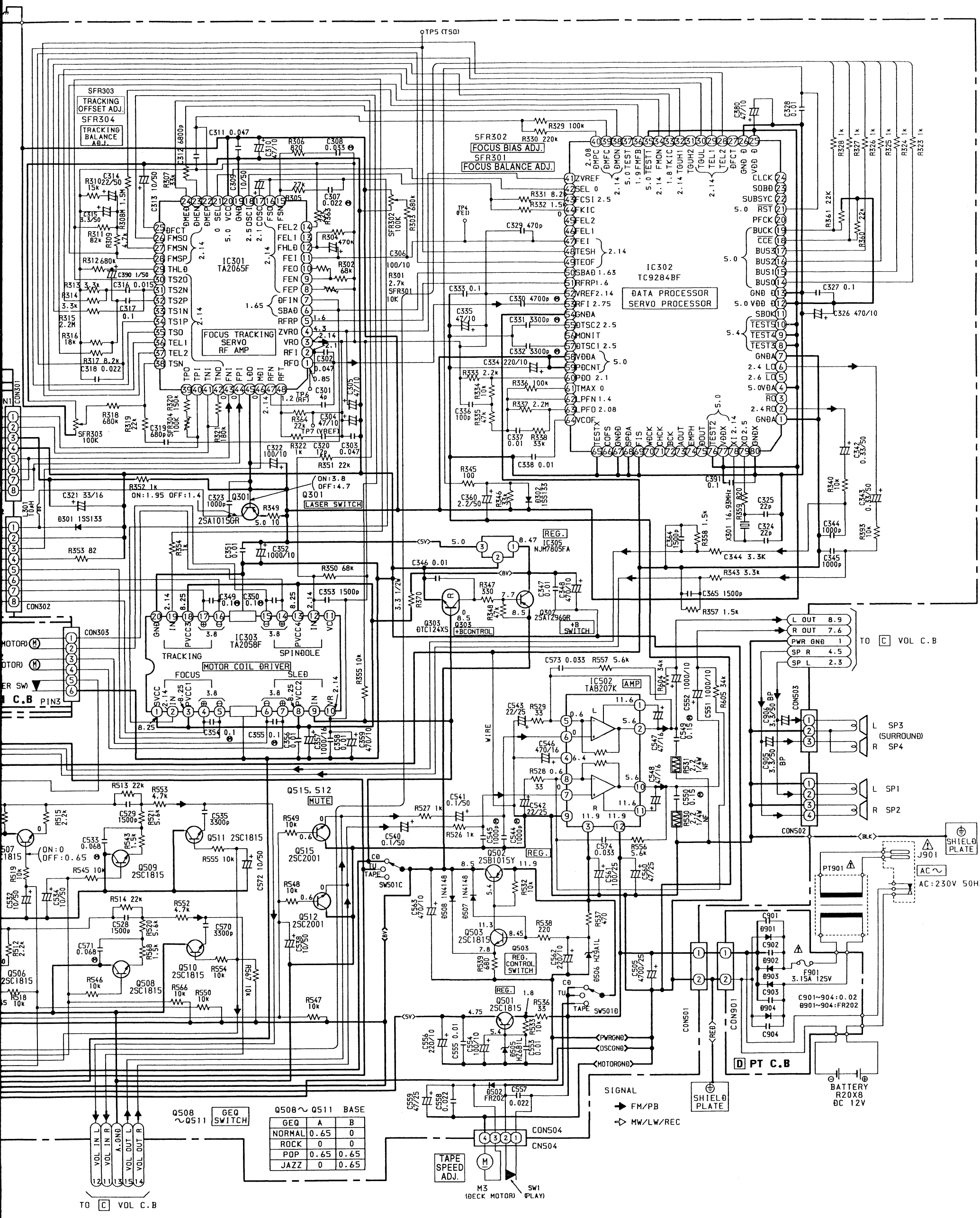
CON1000

SCHEMATIC DIAGRAM-1




TP5 (TSO)
SFR303
TRACKING OFFSET ADJ.
SFR304
TRACKING BALANCE ADJ.
SFR302
FOCUS BIAS ADJ.
SFR301
FOCUS BALANCE ADJ.
IC301
TA2065F
FOCUS TRACKING SERVO RF AMP
IC302
TC9284BF
DATA PROCESSOR SERVO PROCESSOR
IC303
TA2058F
TRACKING
SPINDOLE
MOTOR COIL DRIVER
FOCUS
SLED
IC502
TA8207K
AMP
REG.
IC305
NJM7805FA
Q301
LASER SWITCH
2SA1015GR
Q303
+BCONTROL
+B SWITCH
2SA1296GR
Q515, 512
MUTE
Q515
2SC2001
Q512
2SC2001
Q511 2SC1815
Q509
2SC1815
Q506
2SC1815
Q510
2SC1815
Q508
2SC1815
Q502
2SB1015Y
Q503
2SC1815
REG. CONTROL SWITCH
Q501
2SC1815
SW501C
SW501D
CON301
CON302
CON303
CON504
CN504
CON502
CON503
CON501
CON901
TO C VOL C.B
L OUT 8.9
R OUT 7.6
PWR GND 1
SP R 4.5
SP L 2.3
L SP3 (SURROUND)
R SP4
L SP1
R SP2
SHIELD PLATE
J901
AC~
AC:230V 50HZ
PT901
F901
3.15A 125V
C901~904:0.02
D901~904:FR202
D PT C.B
BATTERY
R20X8
DC 12V
SIGNAL
FM/PB
MW/LW/REC
TAPE SPEED ADJ.
M3
(DECK MOTOR)
SW1
(PLAY)
Q508~Q511 BASE
GEQ SWITCH
Q508 ~Q511
GEQ | A | B
NORMAL | 0.65 | 0
ROCK | 0 | 0
POP | 0.65 | 0.65
JAZZ | 0 | 0.65
VOL IN L
VOL IN R
A.GND
VOL OUT L
VOL OUT R
TO C VOL C.B
ON:3.8 OFF:4.7
ON:1.95 OFF:1.4
ON:0 OFF:0.65
WIRE

IC DESCRIPTION-1

IC, TC9284BF

Pin No.	Pin name	I/O	Description
1	GNDA	—	D/A converter R-channel analog GND.
2	RO	O	R-channel data positive output.
3	$\overline{RO}$	O	R-channel data inverted output.
4	VDA	—	D/A converter power supply.
5	$\overline{LO}$	O	L-channel data inverted output.
6	LO	O	L-channel data positive output.
7	GNDA	—	D/A converter L-channel analog GND.
8～10	$\overline{TEST3}$～$\overline{TEST5}$	I	TEST pin. Normally "H" or open.
11	SBOK	O	Sub code Q data CRCC judgment result output. Judgment result OK: H
12	VDDD	—	Digital power supply. (+5 V)
13	GNDD	—	Digital GND.
14～17	BUS0～BUS3	I/O	µprocessor interface, data input/output.
18	CCE	I	µprocessor interface, chip enable signal input. When "L" : BUS 3～0 are active
19	BUCK	I	µprocessor interface, clock input.
20	PFCK	O	PB frame sync output.
21	$\overline{RST}$	I	Reset signal input. "L" at reset.
22	SUBSYC	O	Sub code block sync output. When sub code is detected,"H" at S1 position.
23	SUBD	O	Sub code P～W output.
24	CLCK	I	Sub code P～W data read clock input.
25	VDDD	—	Digital power supply. (+5 V)
26	GNDD	—	Digital GND.
27	DFCT	O	Defect detection signal output. When defect is detected: "VREF", normally "HiZ".
28	TEL2	O	Tracking gain adjustment analog switch output. "VREF" , or "HiZ".
29	TEL1	O	Tracking gain adjustment analog switch output. "VREF" , or "HiZ".
30	TGUL	O	Analog switch output for tracking servo gain up. Polarity in gain-up mode and normal mode can be selected by command.
31	TGUH2	O	Analog switch output for tracking servo gain up. "HiZ" for gain-up, normally "VREF".
32	TUGH1	O	TGUH1 during normal playback. TGUH2: not used
33	TKIC	O	Tracking actuator kick signal output. NKICx and CKICx are used for kick during tracking gain adjustment. "VREF" for outermost track."O" for moving toward inner track. Normally "HiZ".
34	FMON	O	Analog switch output to turn ON/OFF the feed servo. "HiZ" to turn ON servo. "VREF" to turn OFF servo.
35	$\overline{TEST1}$	I	TEST pin. Normally "H" or open.
36	FMFB	O	Feed motor FWD/BWD direction control signal output."2VREF" for outmost track. "O" for moving toward inner track. Normally "HiZ".
37	$\overline{TEST}$	I	TEST pin. Normally "H" or open.
38	DMON	O	Analog switch output to select gain of the disc motor drive circuit. "HiZ" for CLV servo OFF, "HiZ" or "VREF" can be selected by command.

Pin No.	Pin name	I/O	Description
39	DMPC	O	Disc motor CLV servo AFC signal output. Operation / Command / DMFC output Motor acceleration / DMFK / "2VREF" CLV servo ON / DMSV / AFC signal (PWM) Motor brake / DMBK / "L" CLV servo OFF / DMOFF / "VREF"
40	DMPC	O	Disc motor CLV servo APC signal output.
41	2VREF	—	Analog power supply. (twice the "VREF" voltage)
42	SEL	O	Servo mode select output. It turns ON/OFF the laser diode (LD) and focus servo. SEL output / LD / Focus servo / Operating mode "L" / OFF / OFF / LD OFF "HiZ" / ON / OFF / Focus search "H" / ON / ON / Focus ON (normal play)
43	FCSI	O	Focus actuator drive signal output during focus search mode. "VDDA" to move the lens far from disc. "L" to move the lens closer to disc. Normally "HiZ".
44	FKIC	O	Focus actuator drive signal output during focus adjustment mode. "VDDA" to move the lens far from disc. "L" to move the lens closer to disc. Normally "HiZ".
45, 46	FEL1, FEL2	O	Focus gain adjustment analog switch output. "VREF" or "HiZ".
47	FEI	I	Focus error signal input.
48	TESH	I	Analog switch input to track error signal sample-and-hold.
49	TEOF	O	Focus gain adjustment analog switch output."VREF" when tracking servo off.
50	SBAD	I	Sub beam added signal input.
51	RFRP	I	RF ripple signal input.
52	VREF	—	Analog power supply.
53	RFI	I	RF signal input.
54	GNDA	—	Analog GND.
55	DTSC2	O	Data slice control EFM signal inverted output.
56	MONI T	O	Internal signal monitored output. EFMO, PLCK or LOCK signals can be selected by command. Can be muted. (Not used)
57	DTSC 1	O	Data slice control EFM signal positive polarity output.
58	VDDA	—	Analog power supply.
59	PDCNT	I	PDO output control signal input. "L" to fix to "HiZ" forcibly. "H" : normal output.
60	PDO	O	Phase error signal between EFM and PLCK signals is output.
61	TMAX	O	TMAX detected result output. TMAX detected result / TMAX output Longer than specified cycle / "L" Shorter than specified cycle / "VREF" Within specified cycle / "HiZ"
62	LPFN	I	Low-pass filter amplifier inverted input.

Pin No.	Pin
63	L
64	V
65	TE
66	
67	G
68	SE
69	C
70	W
71	CF
72	B
73	AC
74	EN
75	DC
76	$\overline{TE}$
77	VD
78	
79	X
80	GN

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Pin No.	Pin name	I/O	Description
39	DMPC	O	Disc motor CLV servo AFC signal output. Operation / Command / DMFC output Motor acceleration / DMFK / “2VREF” CLV servo ON / DMSV / AFC signal (PWM) Motor brake / DMBK / “L” CLV servo OFF / DMOFF / “VREF”
40	DMPC	O	Disc motor CLV servo APC signal output.
41	2VREF	—	Analog power supply. (twice the “VREF” voltage)
42	SEL	O	Servo mode select output. It turns ON/OFF the laser diode (LD) and focus servo. SEL output / LD / Focus servo / Operating mode “L” / OFF / OFF / LD OFF “HiZ” / ON / OFF / Focus search “H” / ON / ON / Focus ON (normal play)
43	FCSI	O	Focus actuator drive signal output during focus search mode. “VDDA” to move the lens far from disc. “L” to move the lens closer to disc. Normally “HiZ”.
44	FKIC	O	Focus actuator drive signal output during focus adjustment mode. “VDDA” to move the lens far from disc. “L” to move the lens closer to disc. Normally “HiZ”.
45, 46	FEL1, FEL2	O	Focus gain adjustment analog switch output. “VREF” or “HiZ”.
47	FEI	I	Focus error signal input.
48	TESH	I	Analog switch input to track error signal sample-and-hold.
49	TEOF	O	Focus gain adjustment analog switch output.“VREF” when tracking servo off.
50	SBAD	I	Sub beam added signal input.
51	RFRP	I	RF ripple signal input.
52	VREF	—	Analog power supply.
53	RFI	I	RF signal input.
54	GNDA	—	Analog GND.
55	DTSC2	O	Data slice control EFM signal inverted output.
56	MONI T	O	Internal signal monitored output. EFMO, PLCK or LOCK signals can be selected by command. Can be muted. (Not used)
57	DTSC 1	O	Data slice control EFM signal positive polarity output.
58	VDDA	—	Analog power supply.
59	PDCNT	I	PDO output control signal input. “L” to fix to “HiZ” forcibly. “H” : normal output.
60	PDO	O	Phase error signal between EFM and PLCK signals is output.
61	TMAX	O	TMAX detected result output. TMAX detected result / TMAX output Longer than specified cycle / “L” Shorter than specified cycle / “VREF” Within specified cycle / “HiZ”
62	LPFN	I	Low-pass filter amplifier inverted input.

Pin No.	Pin name	I/O	Description
63	LPFO	O	Low-pass filter amplifier output.
64	VCOF	O	VCO filter output.
65	TESTX	I	TEST pin. Normally “H” or “L” .(Connected to +5 V)
66	$\overline{HS}$	O	Double speed mode output. “H” : normal speed. “L” : double speed
67	GNDD	—	Digital GND.
68	SPDA	O	Processor status signal output.
69	COFS	O	Correction circuit frame clock (7.35 kHz) output.
70	WDCK	O	Word clock (88.2 kHz) output. SUBQ, BUF0V or 1PF can be selected by the µprocessor command. (Not used)
71	CHCK	O	Channel clock (44.1 kHz) output. “L”for L-channel. “H” for R-channel.
72	BCK	O	Bit clock (1.4112 MHz) output.
73	AOUT	O	Audio data output. (Not used)
74	EMPH	O	Emphasis ON/OFF select signal. “H” : emphasis ON. “L” for emphasis OFF
75	DOUT	O	DIGITAL SIGNAL output.
76	$\overline{TEST2}$	I	TEST pin. Normally “H”.
77	VDDX	—	Crystal oscillator circuit power supply.
78	XI	I	External crystal oscillator is connected. (Crystal oscillator frequency 16.9344 MHz)
79	XO	O	External crystal oscillator is connected. (Crystal oscillator frequency 16.9344 MHz)
80	GNDX	—	Crystal oscillator GND.

D PT C.B

SP4 (R CH) — (SURROUND) — SP3 (L CH)

(WHT) (BLK) (BLK) (WHT) (BLK)

CN903 CN904

FROM A MAIN C.B T102 SHILD

TO CON903 TO CON904

FROM A MAIN C.B CON503 3 1

TO CON902

BATTERY R20 (1.5V) x 8 12V

CON903 CON904 CON902

(RED) (RED)

C904 C903 D904 D903 F901 C901 C902 D902 D901

PT901

(BLU) (BLK)

J901 AC ~ AC 230V 50Hz

TO CON901 CON501 FROM A MAIN C.B

CON901

(RED) (RED) (RED)

DECK

EH RPH

(RED) (WHT) (YEL) (GRY) (WHT) (YEL) (RED)

CN1

TO A MAIN C.B CON1

SHIELD PLATE

M3 (DECK MOTOR)

SW1 (PLAY)

(WHT) (WHT) (RED) (BLK)

CN504

TO A MAIN C.B CON504

C VOL C.B

J602 PHONES

R621 180 R622 180

VR602 VOLUME

VR602 50KA R619 56k C611 1000p

VR602 50KA R620 56k C610 1000p

VOL IN L VOL IN R VOL GND VOL OUT L VOL OUT R

R.OUT L.OUT PWR GND SP R SP L

FROM A MAIN C.B

B KEY C.B (1/2)

LED701, 705, 707 L934ID (RED)

LED706 L934GD (GRN)

LED701 FM STEREO LED705 OPE/BATT LED706 SURROUND LED707 BASS

8V

R701 1k R704 560 R724 560 R723 820

C704 3.3p C705 20p

R702 33k Q701 OPE DRIVE 2SC1815Y FWD:2.8 REV:2.3

C701 0.01 C702 100/10 R703 4.7k C703 33p L701 33uH

GND

ES55 ONLY

IC700 SBX8010-F VCC GND OUT

L702 24uH D704 1SS133 D703 1SS133 R709 47k

C706 100/16 R708 220k C707 0.01 C708 220/10 C709 10/25 Q702 DTC124XS C710 0.01 C711 0.1 C712 2200p

Q702: RESET

I-RMC

D706 1SS133 R710 1.5k

D701 1SS133 C713 0.01 R728 12k R726 12k R725 10k R727 10k

SW701 SURROUND SW705 BASS SW709

L703 24uH TRIBAL

R729 4.7k

AM BEAT A AM BEAT B AM ST IND AM TUNE R AM TUNE L FM ST IND FM MONO/ST AM/FM SURROUND

BUS0 BUS1 BUS2 BUS3 CCE BUCK MUTE GEQ A GEQ B BASS CD TU D.GND 8V 5V PUINNER

FROM A MAIN C.B

7

FROM
A MAIN C.B
T102 SHILD

PT901

BLU

BLK

901
C ~
230V
50Hz

M3
(DECK
MOTOR)

C VOL C.B

J602
PHONES

R621 180
R622 180

VR602
VOLUME

VR602 50KA
R619 56k
C611 1000p

VR602 50KA
R620 56k
C610 1000p

VOL IN L 12
VOL IN R 11
VOL GND 13
VOL OUT L 15
VOL OUT R 14

R.OUT 7
L.OUT 8
PWR GND 9
SP R 1
SP L 4 5
2 3

FROM A MAIN C.B

B KEY C.B (1/2)

LCD701
(DISPLAY)

1 COM3
2 COM2
3 COM1
4 SEG19
5 SEG18
6 SEG17
7 SEG16
8 SEG15
9 SEG14
10 SEG13
11 SEG12
12 SEG11
13 SEG10
14 SEG9
15 SEG8
16 SEG7
17 SEG6
18 SEG5
19 SEG4
20 SEG3
21 SEG2
22 SEG1

SEG5 80
SEG6 79
SEG7 78
SEG8 77
SEG9 76
SEG10 75
SEG11 74
SEG12 73
SEG13 72
SEG14 71
SEG15 70
SEG16 69
SEG17 68
SEG18 67
SEG19 66
65
2.3

SEG4 1
SEG3 2
SEG2 3
SEG1 4
COM3 5
COM2 6
COM1 7
2.3

LED701, 705, 707
L934ID (RED)
LED706
L934GD (GRN)

LED701 FM STEREO
LED705 OPE/BATT
LED706 SURROUND
LED707 BASS

8V
LED701
LED705
LED706
LED707

R701 1k
R704 560
R705 330
R724 560
R723 820

FWD:2.8
REV:2.3

R702 33k
Q701
OPE DRIVE
2SC1815Y
0.7
C701 0.01
C702 100/10
R703 4.7k
GND

NC (GND) 9
VLC (GND) 10
O-SURROUND LED 11 H:6.9 L:0
O-SURROUND 12 H:7.8 L:0
O-BASS 13 H:3.2 L:0
O-MUTE 14 3.2
GND 15
O-FMMONO 16 0
O-BASS LED 17 H:7.1 L:0
18
19
TEST (GND) 20 0
X IN 21 2.2
X OUT 22 2.3
I-RESET 23
+5V (HOLD) 24 4.7

C704 3.3p
C705 20p
C703 33p
L701 33µH
GND

ES55 ONLY
IC700
SBX8010-F
VCC GND OUT
3 2 1
C706 100/16
R708 220k

L702 24µH
D704 1SS133
D703 1SS133
R709 47k
C709 10/25
C707 0.01
C708 220/10
5V
GND
Q702 DTC124XS
C710 0.01
C711 0.1
C712 2200p
Q702: RESET

I-RMC

8V
D706 1SS133
R710 1.5k
D701 1SS133
C713 0.1
R728 12k
R726 12k
R725 10k
R727 10k
R729 4.7k
L703 24µH TRDIBAL

AM BEAT A 32
AM BEAT B 31
AM ST IND 44
AM TUNE R 46
AM TUNE L 45
FM ST IND 44
FM MONO/ST 43
AM/FM 42
SURROUND

BUS0 40
BUS1 39
BUS2 38
BUS3 37
CCE 36
BUCK 35
MUTE 17
GEQ A 18
GEQ B 19
BASS 16
CD 25
TU 27
D.GND 34
8V 26
5V 30
PUINNER 41

FROM A MAIN C.B

IC701
TMP47C620DF
SYSTEM CONTROL

X701 32.768K
C714 22p
C715 22p

2.2
1.7
0
I-DOOR 50
I-PUINNER 49
O-BUS0 48
O-BUS1 47
O-BUS2 46
O-BUS3 45
O-CCE 44
O-BUCK 43
I-RMC 42
O-BEAT A 41
H:4.97 L:0
4.7
H:24 L:0

I-DOOR 1
GND 2
CON701 2P
SW4
(CD DOOR)

H:4.6 L:0
H:4.6 L:0
5.2
4.7
H:5.1 L:0
H:3.2 L:0
2.4 L:0
0

25 I-KD0
26 I-KD1
27 I-KD2
28 I-KD3
29 I-TU (B)
30 I-CA (A)
31 I-P.CONT
32 5V
33 I-AM/FM
34 O-GEQ A
35 O-GEQ B
36 O-BEAT B
37 R40
38 R41
39 R42
40

C716 1200p
R718 470k
R719 470k
ES40 ONLY
R733 47k

5V
GND

R7 47k
R7 47k
R7 47k
R7 47k
R7 47k
R7 47k

SW701 SURROUND
SW702 MEMORY
SW703
SW704 PLAY/PAUSE
SW705 BASS
SW706 REPEAT
SW707 STOP
SW708
SW709
SW710

FM MODE OSC

IC DESCRIPTION-2

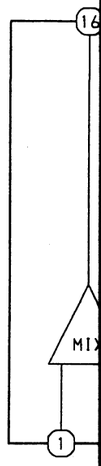
IC, TMP47C620F

Pin No.	Pin Name	I/O	Description
1	SEG4	O	Segment output terminal for LCD.
2	SEG3	O	
3	SEG2	O	
4	SEG1	O	
5	COM3	O	Common output terminal for LCD.
6	COM2	O	
7	COM1	O	
8	NC	—	Not used.
9	NC	—	Not used (Connected to GND).
10	VLC	—	LCD drive voltage setting (Connected to GND).
11	O-FM MONO	O	FM enforced MONO output.
12	O-MUTE	O	Main mute control.
13, 14	NC	—	Not used.
15	VSS	—	Connected to GND.
16～19	NC	—	Not used.
20	TEST	—	Connected to GND.
21	XIN	—	4MHz clock oscillation.
22	XOUT	—	
23	$\overline{\text{I-RESET}}$	I	Micro processor reset input.
24	HOLD	—	+5V.
25	I-KO0	O	Key board scan output.
26	I-KO1	O	
27	I-KO2	O	
28	I-KO3	O	
29	$\overline{\text{O-CDRESET}}$	O	CD reset output.
30	I-TU	I	Function Tuner input.
31	I-CD	I	Function CD input.
32	I-P. CONT	I	Power supply control.
33	VDD	—	Power supply (+5V).
34	$\overline{\text{O-DUBB SP}}$	O	Tape dubbing speed select output.
35	O-AM BEAT A	O	AM beat A select control.
36	O-AM BEAT B	O	AM beat B select control.
37	O-GEQ B	O	Tone select control B.
38	R40	I	Key board scan input.
39	R41	I	
40	R42	I	
41	O-GEQ A	O	Tone select control A.
42	I-RMC	I	Remote control receive data input.
43	O-BUCK	O	Command and data send/receive clock.
44	$\overline{\text{O-CCE}}$	O	Chip enable signal for command and data send/receive.
45	O-BUS3	I/O	Command and data I/O terminal.

Pin No.	Pin Name	I/O	Description
46	O-BUS2	I/O	Command and data I/O terminal.
47	O-BUS1	I/O	
48	O-BUS0	I/O	
49	I-PUINNER	I	Pick up inner switch detect.
50	I-DOOR	I	CD door switch detect.
51	XTIN	—	32.768kHz oscillation.
52	XTOUT	—	
53～76	NC	—	Not used.
77	SEG8	O	LCD segment output.
78	SEG7	O	
79	SEG6	O	
80	SEG5	O	

IC BLOCK DIAG

IC, KA2271

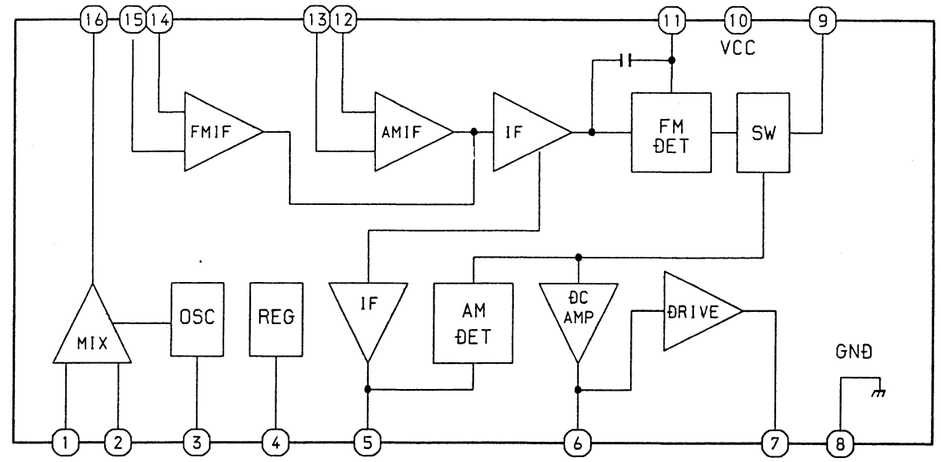


IC, TA2058F

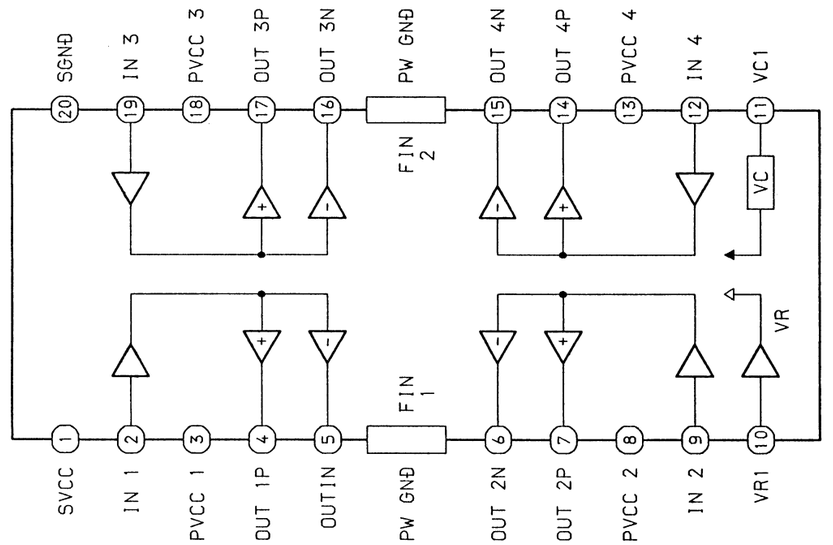
Pin No.	Pin Name	I/O	Description
46	O-BUS2	I/O	Command and data I/O terminal.
47	O-BUS1	I/O	
48	O-BUS0	I/O	
49	I-PUINNER	I	Pick up inner switch detect.
50	I-DOOR	I	CD door switch detect.
51	XTIN	—	32.768kHz oscillation.
52	XTOUT	—	
53~76	NC	—	Not used.
77	SEG8	O	LCD segment output.
78	SEG7	O	
79	SEG6	O	
80	SEG5	O	

IC BLOCK DIAGRAM

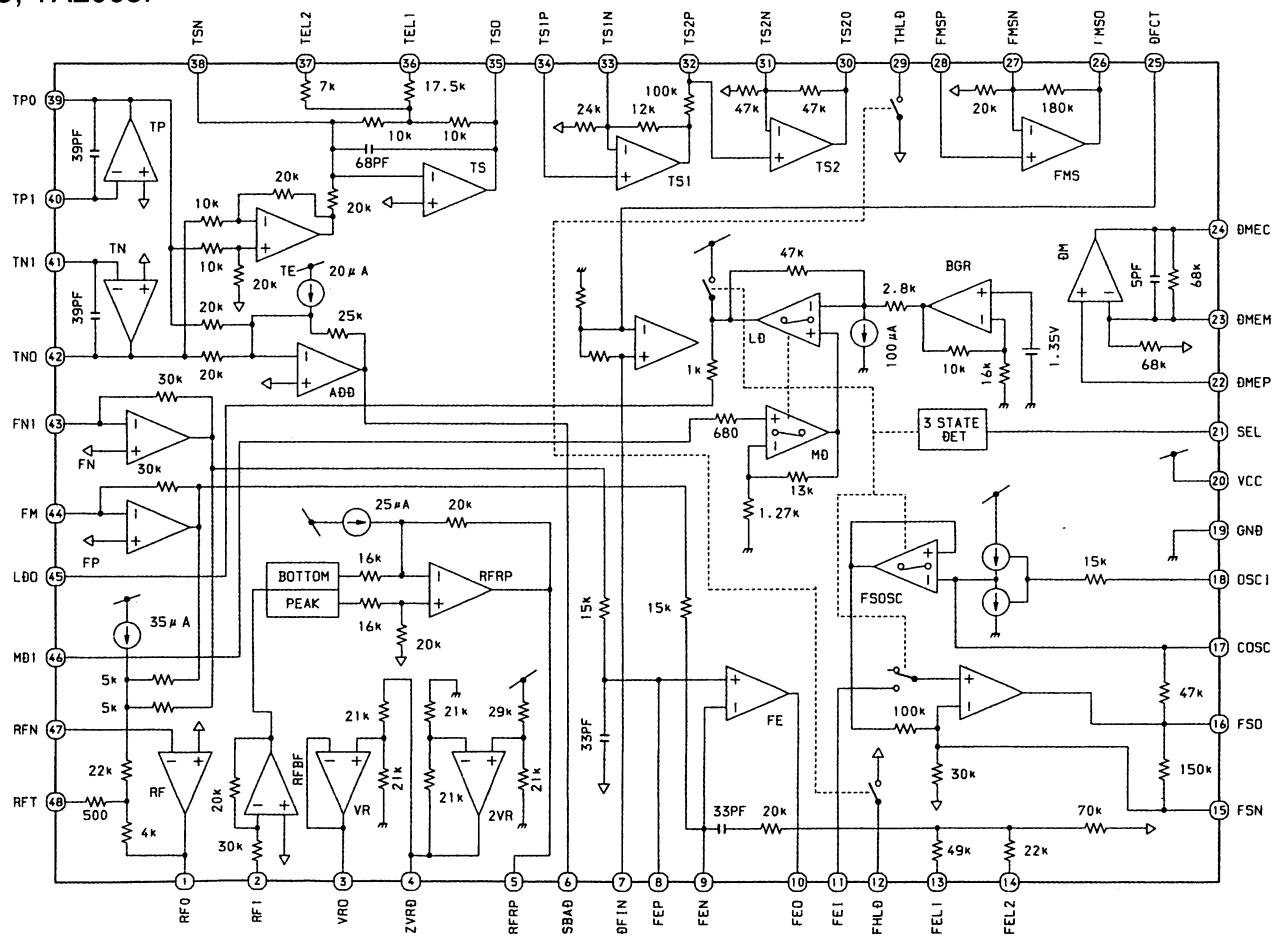
IC, KA2271



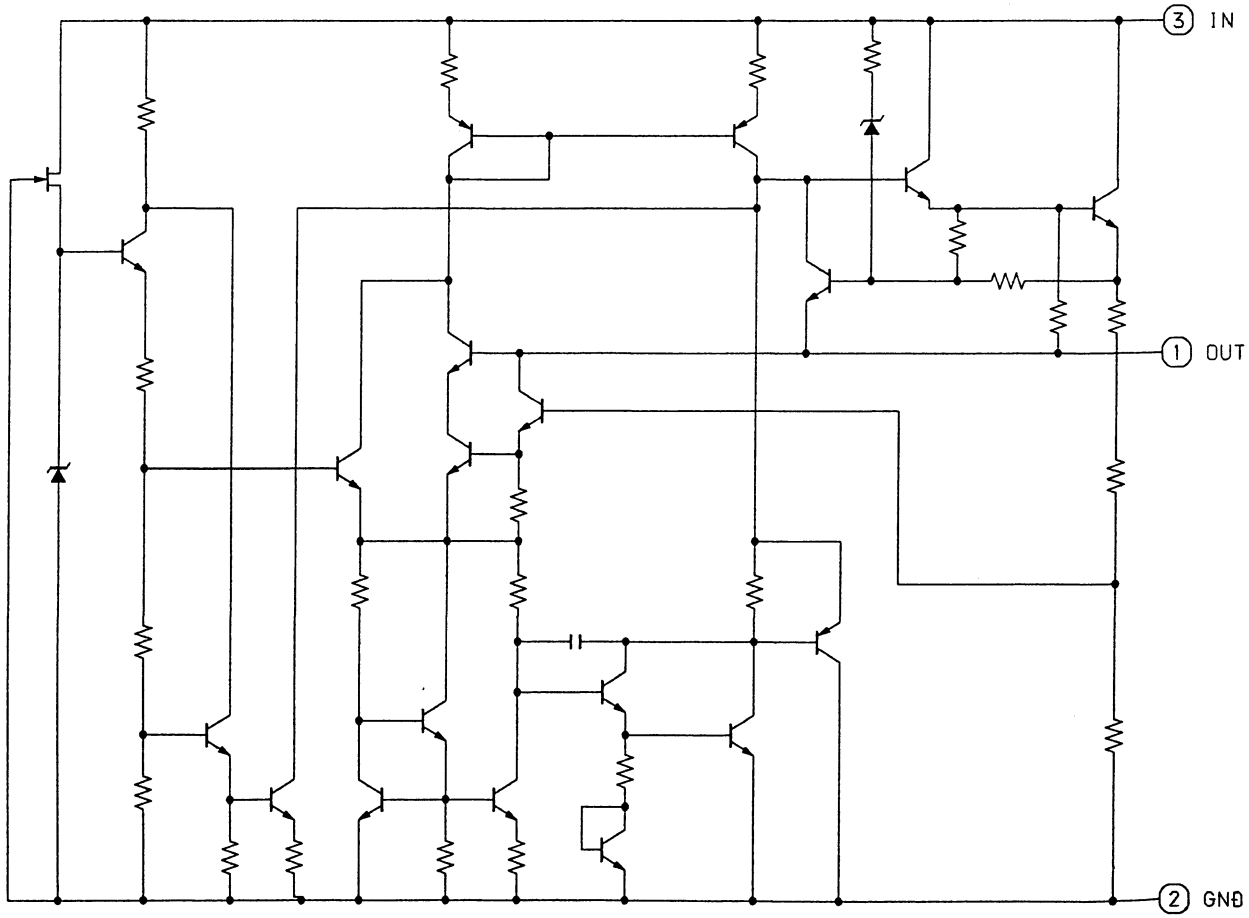
IC, TA2058F



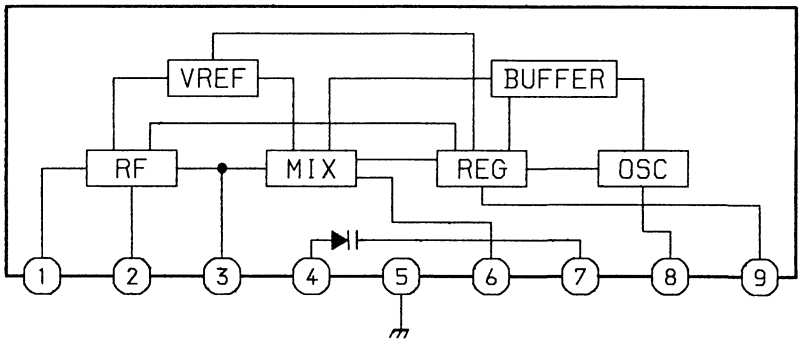
IC, TA2065F



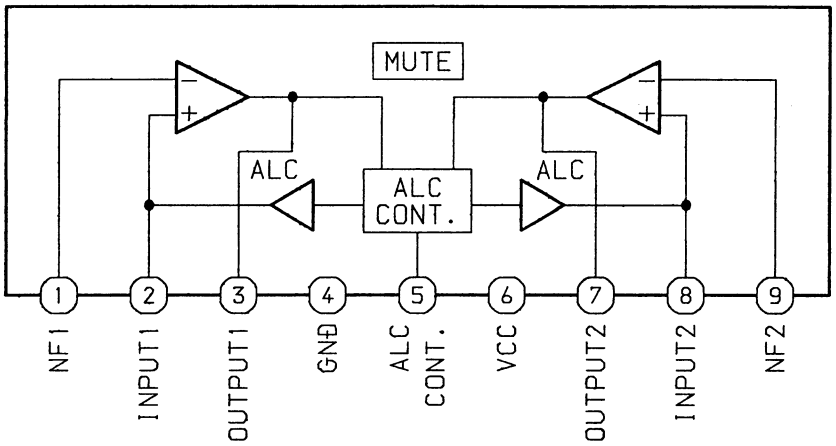
IC, NJM78M05



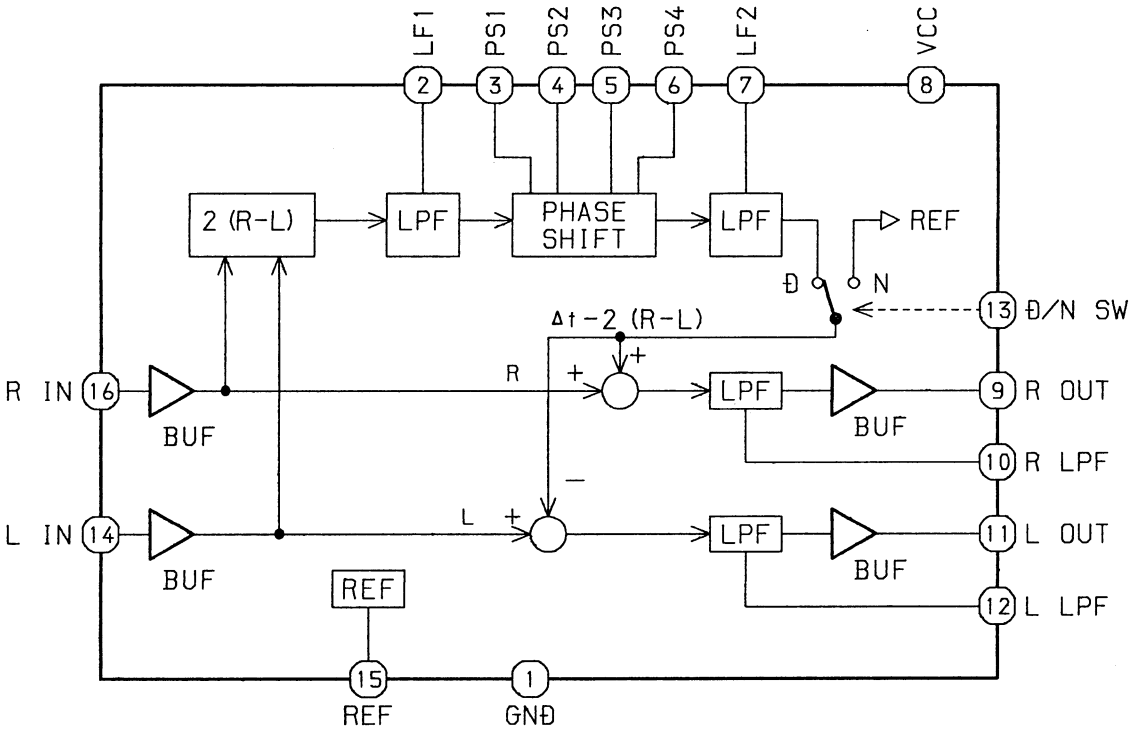
IC, LA1186N



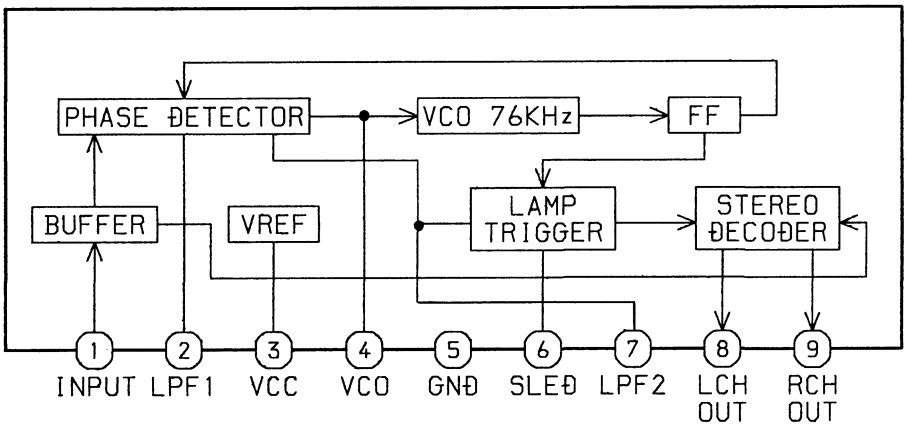
IC, KA22241



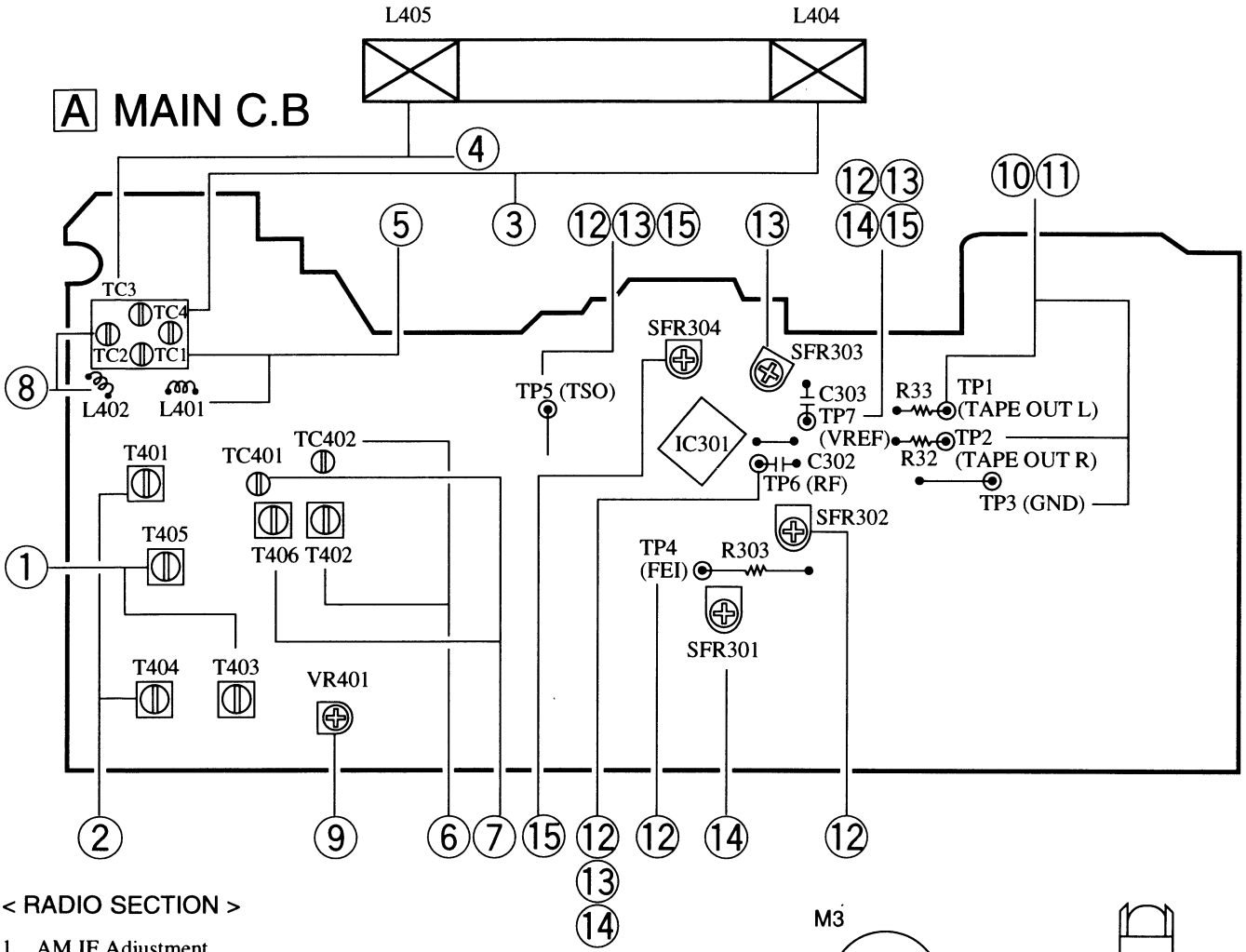
IC, TA8173AP

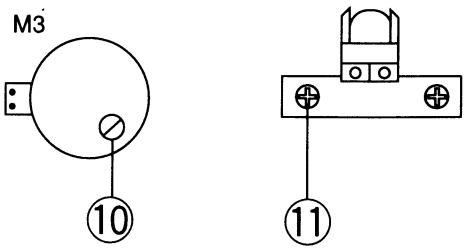


IC, KA2263B



ELECTRICAL ADJUSTMENT





< RADIO SECTION >

1. AM IF Adjustment
   T403, T405 ..... 465kHz

2. FM IF Adjustment
   T401, T404 ..... 10.7MHz

3. MW Tracking Adjustment
   L404 ..... 600kHz
   TC4 ..... 1400kHz

4. LW Tracking Adjustment
   L405 ..... 150kHz
   TC3 ..... 285kHz

5. FM Tracking Adjustment
   L401 ..... 88MHz
   TC1 ..... 108MHz

6. MW Frequency Range Adjustment
   T402 ..... 517kHz
   TC402 ..... 1650kHz

7. LW Frequency Range Adjustment
   T406 ..... 145kHz
   TC401 ..... 295kHz

8. FM Frequency Range Adjustment
   L402 ..... 87.4MHz
   TC2 ..... 108.3MHz

9. FM Stereo MPX VCO Adjustment
   VR401 ..... 38kHz

< TAPE RECORDER SECTION >

10. Tape speed Adjustment
    Condition:
    - Test tape: TTA-100 (TTA-111S)
    - Test point: TP1, 2, 3
    - Adjustment location: SFR of deck motor

    Method: Play back the test tape and adjust so that the output frequency is 3000Hz.

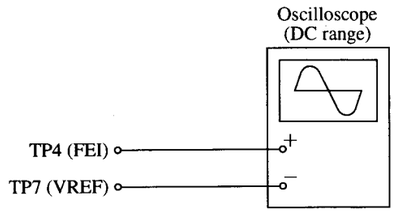
11. Azimuth Adjustment
    Condition:
    - Test tape: TTA-320 (TTA-113B, TTC-152)
    - Test point: TP1, 2, 3
    - Adjustment location: Azimuth adjustment screw

    Method: Play back the test tape and adjust so that the output is maximum.

< CD SECTION >

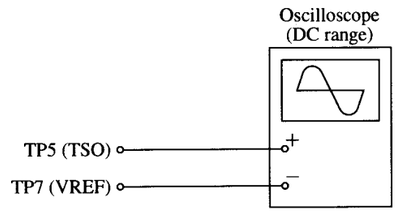
Note: • Connect a probe (10: 1) of the oscilloscope to a test point.

12. Focus Bias Adjustment



1) Make short-circuit between TP6 (RF) and TP7 (VREF) by wire.
2) Connect an oscilloscope between test points TP4 (FEI) and TP7 (VREF).
3) Turn on the main power to the CD player.
4) Insert the test disc TCD-782 (YEDS-18) and reads the TOC data.
5) Adjust SFR302 so that the offset level is 0±10mV.
6) Remove short-circuit after completing adjustment.

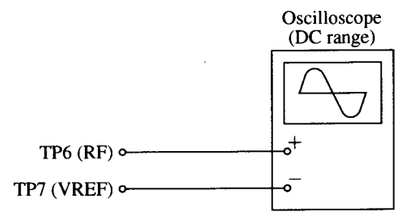
13. Tracking offset Adjustment



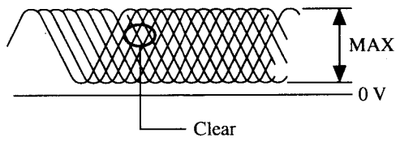
1) Make short-circuit between TP6 (RF) and TP7 (VREF) by wire.
2) Connect an oscilloscope between test points TP5 (TSO) and TP7 (VREF).
3) Turn on the main power to the CD player.
4) Insert the test disc TCD-782 (YEDS-18) and reads the TOC data.
5) Adjust SFR303 so that the offset level is –10±10mV.
6) Remove short-circuit after completing adjustment.

14. Focus Balance Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.

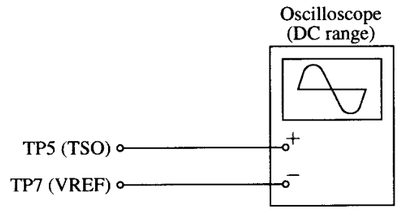


1) Connect an oscilloscope to test points TP6 (RF) and TP7 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4) Adjust SFR301 so that the level of RF wave to be maximum and clear.

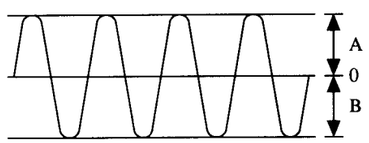


VOLT/DIV : 20mV
TIME/DIV : 0.2μS

15. Tracking Balance Adjustment



1) Connect an oscilloscope to test points TP5 (TSO) and TP7 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and press the PLAY (▶) button.
4) Push and hold the ⏭ button. (MS mode)
5) Adjust SFR304 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.



A = B

PRACTICAL SERVICE FIGURE

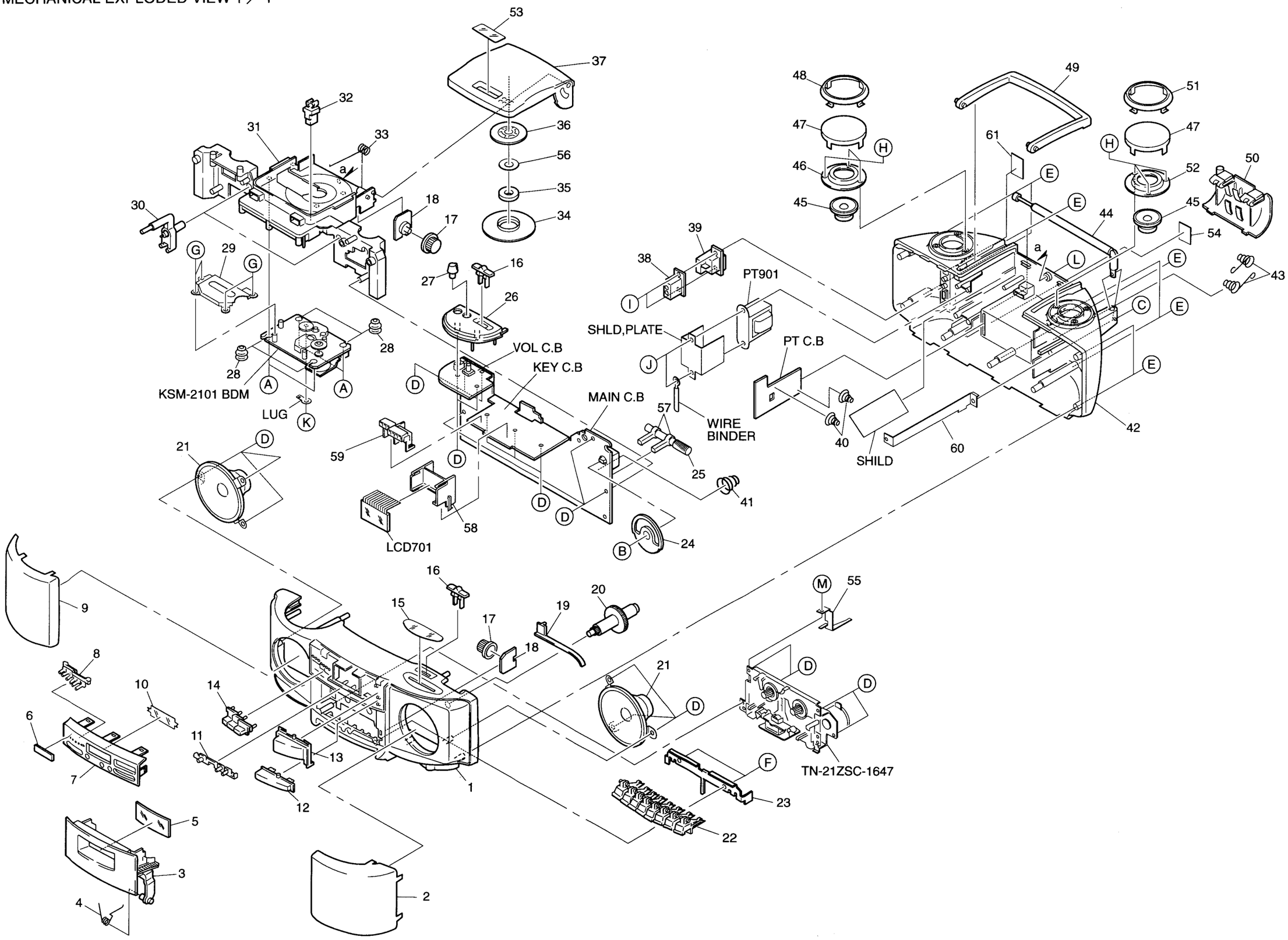
< RADIO SECTION >

Sensitivity:	
(S/N 30dB)	FM Less than 25dB (98MHz)
(S/N 20dB)	MW Less than 60dB (1000kHz)
	LW Less than 66dB (200kHz)
Intermediate frequency:	FM 10.7MHz
	AM 465kHz
FM stereo separation:	More than 20dB (1kHz)

< TAPE RECORDER SECTION >

Distortion:	Less than 3% (PB, 1kHz)
	Less than 5% (REC/PB, 1kHz)
S/N ratio:	More than 30dB
	(PB, REC/PB, AC, DC)
Erasing ratio:	More than 45dB
Noise level:	Less than 40mV (DC, VOL MAX)
Wow & Flutter:	Less than 0.4% (RMS)
Take-Up Torque:	30~60g-cm (FWD)
F.F & REW Torque:	55~120g-cm
Test tape:	TTA-100 (TTA-111S)
	NORMAL TTA-601
	(TTA-600, TTA-119)
	TTA-320
	(TTA-113B, TTC-152)

MECHANICAL EXPLODED VIEW 1 ／ 1

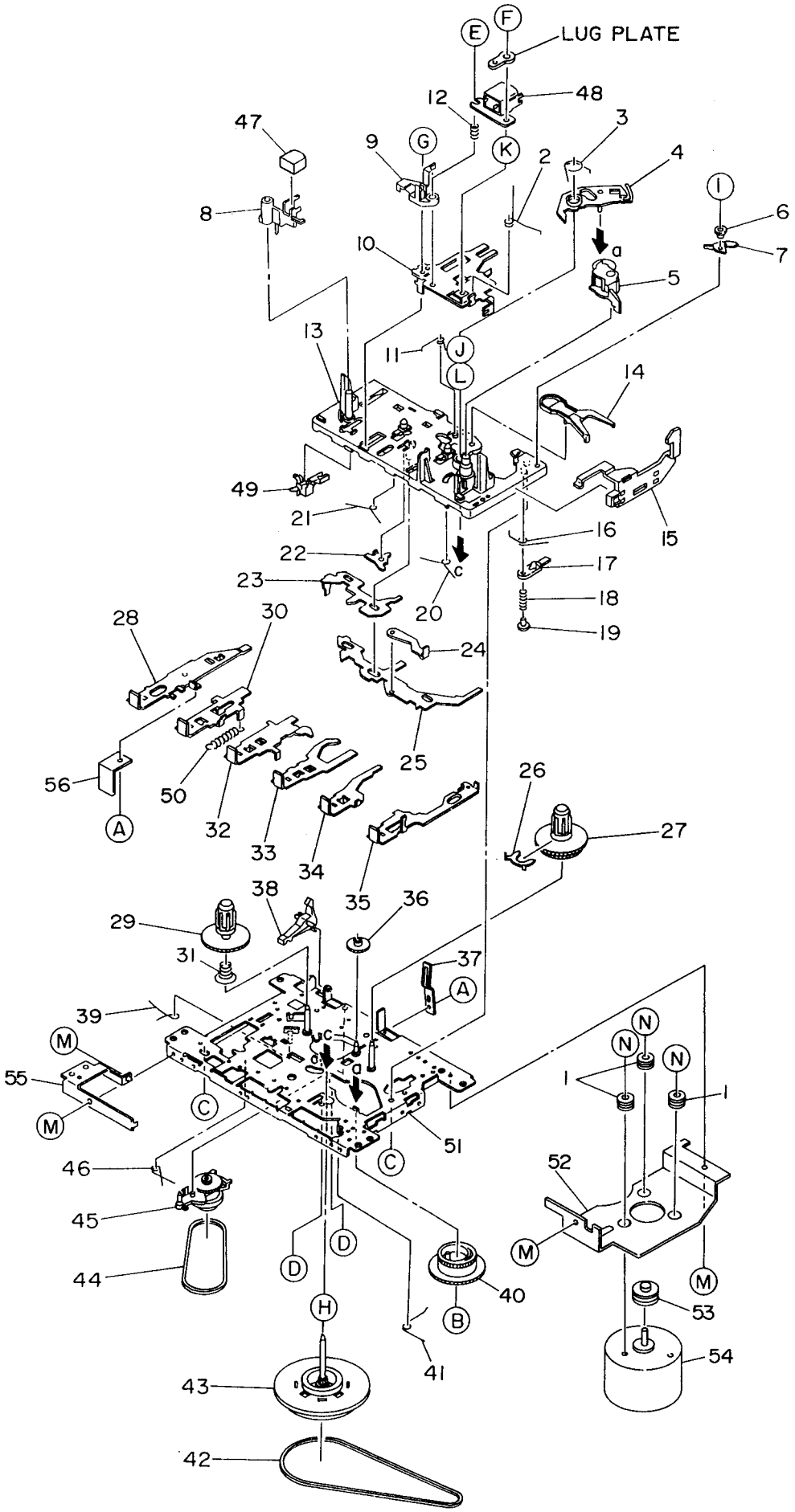


MECHANICAL PARTS LIST 1 ／ 1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	S1-032-250-301		CAB,FRONT<5EZ,5EEZ>
1	S1-032-250-601		CAB,FRONT<EEZ>
2	S2-010-440-101		GRILL,SPKR(R)
3	S1-032-260-301		BOX,CASS(CSDES40EZ)<EEZ>
3	S1-032-260-401		BOX,CASS(CSDES55)<5EZ,5EEZ>
4	S2-010-530-101		SPR,BOX CASS
5	S1-032-500-101		LENS,BOX CASS
6	S1-030-990-101		BADGE AIWA
7	S1-032-270-103		PANEL,LCD<EEZ>
7	S1-032-270-303		PANEL,LCD<5EZ,5EEZ>
8	S1-032-480-101		LENS,LED
9	S2-010-430-101		GRILL,SPKR(L)
10	S1-032-490-101		LENS,LCD
11	S1-032-430-101		KNOB,CONTROL CD
12	S1-032-420-101		KNOB,SKIP CD
13	S1-032-410-101		KNOB,P/S CD
14	S1-032-440-101		KNOB,EQ
15	S1-032-510-301		LENS,DIAL
16	S1-032-450-101		SW,SLIDE
17	S1-030-850-101		GEAR,DAMPER
18	S1-030-860-101		BRACKET,DAMPER
19	S1-032-520-101		POINTER PE
20	S1-032-460-101		KNOB,TUNING
21	S1-700-421-000		SPEKR BLK CAP
22	S1-032-650-101		KEY,CASS(CSDES40)
23	S2-010-450-101		HOLDER KEY CASS
24	S1-032-530-101		DRUM,DIAL(BLK)
25	S1-800-051-000		BAR,FERRITE
26	S1-032-280-301		PANEL,TOP<EEZ>
26	S1-032-280-401		PANEL,TOP<5EZ,5EEZ>
27	S1-032-470-101		KNOB,VOL
28	S3-004-152-000		CUSHON CD
29	S2-010-860-101		COVER,CD
30	S1-032-560-101		LEVER,SWITCH(BLK)
31	S1-032-310-101		BRACKET,CD
32	S8-025-610-000		SW/W LATCH DOOR CD
33	S2-010-520-101		SPR,DOOR CD
34	S1-032-400-101		CHUCK,CD BOT
35	S2-005-131-000		CD DOOR MAGNET
36	S1-032-390-101		CHUCK,CD TOP
37	S1-032-320-101		DOOR,CD
38	S1-014-491-000		AC JACK COVER
⚠ 39	S2-3C0-071-000		VDF SOCKET AC
40	S2-010-500-101		SPR,BAT(-)
41	S2-010-560-101		SPR,CONTACT ANT
42	S1-032-300-101		CAB,REAR
43	S2-010-510-101		SPR,BAT(+/-)
44	SA-N00-361-000		ANT,6.0-187
45	S1-700-611-000		SPRK,8 OHM
46	S1-032-350-101		COVER,SPKR(L)
47	S2-010-490-101		GRILL,SPKR(SURROUND)
48	S1-032-370-101		RING,SPKR(L)
49	S1-032-330-101		HANDLE
50	S1-032-340-101		DOOR,BAT
51	S1-032-380-101		RING,SPKR(R)
52	S1-032-360-101		COVER,SPKR(R)
53	S1-032-570-101		PLATE,DOOR CD
54	S1-032-580-101		PLATE,BAT
55	S2-010-540-101		PLATE RECORD<EEZ>
55	S2-010-600-101		PLATE,RECORD<5EZ,5EEZ>
56	S2-010-460-101		MAGNET PLATE
57	S1-032-630-101		HOLDER BAR FERRITE
58	S1-032-540-101		HOLDER,LCD(BLK)
59	S1-032-550-101		HOLDER,LED(BLK)
60	S2-010-480-101		PLATE CONTACT ANT
61	S1-032-590-101		PLATE,AC
A	SC-D00-040-100		CD SCREW DIA 2.6-L17MM
B	87-067-767-010		BH/MS 2.6-L6MM
C	87-268-095-010		BH/MS 3-L8MM
D	87-751-096-010		BH/TS 3-L10MM
E	87-751-104-410		BH/TS 3-L30MM
F	87-325-075-210		KH/TS 2.6-L10MM
G	87-343-034-010		PH/TS 2-L5MM
H	87-743-074-410		PH/TS 2.6-L8MM
I	87-353-076-210		SCREW VT2+2.6-12
J	87-761-100-410		WPH/TS 3-L16MM
K	87-251-035-410		SCREW U+2-6
L	87-741-097-410		SCREW UT2+3-12
M	87-254-033-410		BH/MS 2-L4MM

TAPE MECHANISM EXPLODED VIEW 1 / 1

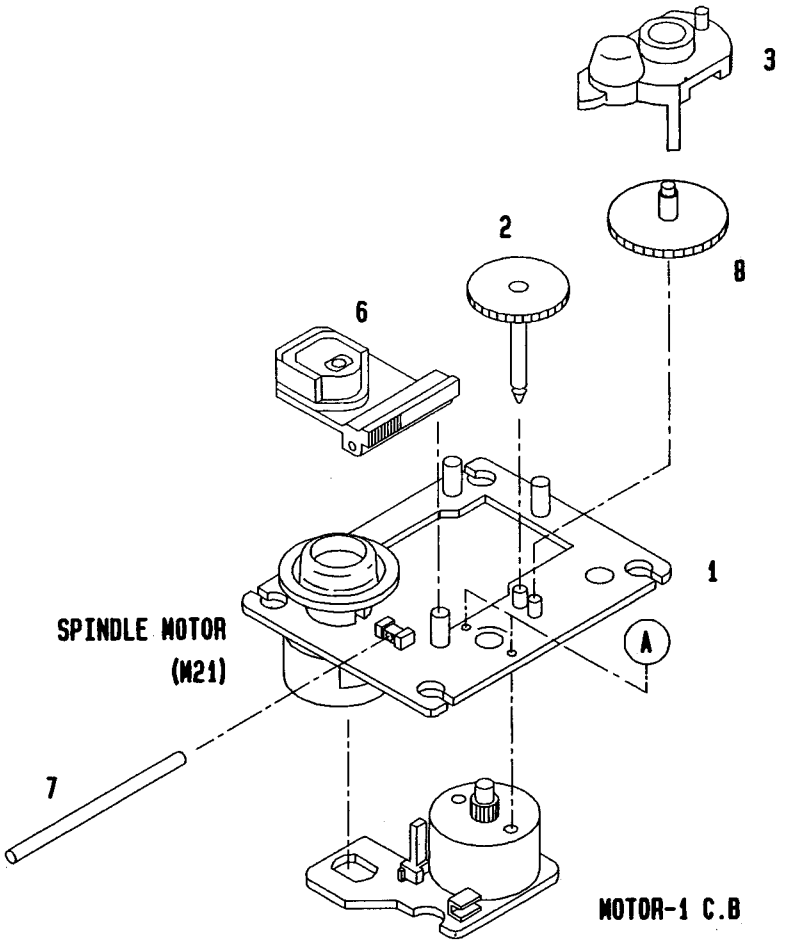


TAPE MECHANISM PARTS LIST 1 ／ 1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	S1-821-120-660		MOTOR RUBBER
2	S1-921-030-090		PANEL P SPRING
3	S1-921-260-050		GEAR PLATE SPRING
4	S1-921-265-020		GEAR PLATE ASSY
5	S1-921-043-090		PINCH ROLLER ARM ASY
6	S1-921-140-370		P ARM COLLER
7	S1-921-140-340		P ARM
8	S1-921-030-050		MG ARM
9	S1-921-030-4A0		HEAD BASE
10	S1-921-030-110		HEAD PANEL
11	S1-921-141-8A0		M CONTROL SPRING
12	S1-821-030-070		AZIMUTH SPRING
13	S1-921-143-010		BASE ASSY
14	S1-921-260-4A0		SENSING LEVER
15	S1-921-130-020		EJECT SLIDE LEVER
16	S1-921-141-3A0		P CONTROL SPRING
17	S1-921-140-550		PAUSE LEVER(E)
18	S1-921-140-120		PAUSE LEVER SPRING
19	S1-921-140-110		PAUSE STOPPER
20	S1-921-140-150		BUTTON LEVER SPRING(B)
21	S1-921-140-140		BUTTON LEVER SPRING(A)
22	S1-921-140-200		PR STOPPER
23	S1-921-140-090		SWITCH ACTUATOR
24	S1-821-011-590		E KICK LEVER
25	S1-921-140-080		PUSH BUTTON ACTUATOR
26	S1-921-050-060		SENSER
27	S1-921-053-030		TAKE UP REEL ASSY
28	S1-921-140-220		REC BUTTON LEVER
29	S1-921-053-040		SUPPLY REEL ASSY
30	S1-921-140-230		PLAY BUTTON LEVER
31	S1-821-100-990		BACK TENSION SPRING
32	S1-921-140-240		REW BUTTON LEVER
33	S1-921-140-250		FF BUTTON LEVER
34	S1-921-140-260		STOP BUTTON LEVER
35	S1-921-140-610		PAUSE BUTTON LEVER
36	S1-821-100-700		FF GEAR
37	S1-829-100-010		PACK SPRING
38	S1-821-100-690		RECORD SAFETY LEVER
39	S1-921-140-210		REC BUTTON LEVER SPRING
40	S1-921-260-020		CAM GEAR
41	S1-921-140-160		E ACTUATOR SPRING
42	S1-921-090-040		MAIN BBELT
43	S1-921-093-030		FLYWHEEL ASSY
44	S1-921-070-030		RF BELT
45	S1-921-073-080		RF CLUTCH ASSY
46	S1-921-140-170		P.S.LEVER SPRING
47	S6-209-100-100		E HEAD PH-K380-MS1
48	S6-201-011-110		HEAD,RP7442ES-0951
49	S6-401-011-490		LEAF SW MSW-1541T
50	S1-821-010-500		PLAY BUTTON LEVER SPRING
51	S1-921-015-010		CHASSIS ASSY
52	S1-921-120-540		MOTOR BRACKET
53	S1-921-120-010		MOTOR PULLEY
54	S6-002-030-220		MOTOR EG530AD-2B
55	S1-921-010-160		SIDE BRACKET
56	S1-510-020-020		REC SPRING PLATE
A	S9-179-000-000		C TAP SCREW M2-3
B	S9-422-000-000		P WASHER CUT 12-3.8-0.3
C	S9-679-000-000		P TAP SCREW M2-5
D	S9-999-180-090		TAP SCREW M2-4.5
E	S9-922-000-000		AZIMUTH SCREW M2-8
F	S9-115-000-000		+ BIND SCREW M2-3
G	S9-004-000-000		SCREW M2-6
H	S9-882-000-000		P WASHER 2-3.5-0.4
I	S9-999-200-410		P TAP SCREW M2-3
J	S9-999-030-130		P WASHER CUT 1.45-3.8-0.
K	S9-539-000-000		Y WASHER B.S 0.2T
L	S9-999-000-030		P WASHER2.1-4-0.13
M	S9-180-000-000		C TAP SCREW M2-4
N	S1-851-140-180		MOTOR COLLER SCREW

CD MECHANISM EXPLODED VIEW 1 ／ 1



CD MECHANISM PARTS LIST 1 ／ 1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	9X-262-587-010		MOTOR CHASSIS ASSY
2	92-625-188-020		GEAR(A)
3	92-625-544-010		COVER
6	98-848-137-210		OPTICAL PICK UP KSS-210B
7	92-626-908-010		SHAFT SLED
8	92-626-081-010		GEAR B
A	87-261-032-210		V+2-3

■ ACCESSORIES ／ PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	S4-401-391-000		INSTRUCTION BOOKLET(40/55)
2	SR-CES-55E-X00		RC,RC-ES55EX(55)
3	S1-400-122-000		CORD,POWER AC

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGESUPPRESSOR
セラコン	CAP,CERA

サービス技術ニュース	
番 号	連絡内容
G — —	
G — —	
G — —	

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM,SHAFT
ジグガイド	GUIDE,SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW,SERRART

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